Amendments to the claims (this listing replaces all prior versions):

1-7. (Cancelled).

8. (Original) An apparatus comprising:

a first reflective surface to reflect light rays emanating from a point, the first reflective surface having a curvature such that substantially all of the reflected light rays propagate at a first angle relative to an axis that passes through the point and converge towards a region to produce uniform illumination at the region.

9. (Original) The apparatus of claim 8 in which the reflective surface comprises a ruthenium layer.

10. (Original) The apparatus of claim 8 in which the reflective surface comprises multilayer coatings.

11. (Original) The apparatus of claim 8 further comprising a second reflective surface to reflect light rays emanating from the point, the second reflective surface having a curvature such that the reflected light rays propagate at a second angle with the optical axis, the reflected light rays forming an annular wave front that converges towards the region.

12. (Original) The apparatus of claim 11 in which the second angle is different from the first angle.

13. (Previously presented) An apparatus comprising:

a reflective surface positioned relative to an optical axis to reflect light rays emanating from a location on the optical axis so that the light rays converge towards a region on a plane perpendicular to the optical axis, the reflective surface having a curve segment that comprises a section of a parabolic curve that has a focal point at the location and has been rotated through an angle relative to the optical axis about an axis of rotation that is non-parallel to the optical axis.

14. (Original) The apparatus of claim 13 in which the reflective surface comprises the surface swept by sweeping the curve segment about the optical axis.

15. (Original) The apparatus of claim 13 in which the rotation angle of the parabolic curve equals the angle between the optical axis and a propagation direction of light rays reflected by the reflective surface.

16. (Original) The apparatus of claim 13 in which the rotated parabolic curve may be represented by an equation

$$Z[x,f,\theta]=-\frac{1}{4}Csc^2[\theta]\,Sec[\theta]\left(-4f-4f\,Cos[2\theta]+x\,Sin[\theta]+8\sqrt{f}\,\sqrt{Cos^2[\theta](f-x\,Sin[\theta])}+x\,Sin[3\theta]\right),$$

where Z is the distance between a point on the curve and a plane passing through the location and perpendicular to the optical axis, x is the distance from the point to the optical axis, θ is the angle of rotation of the parabolic curve, and f is the focal length of the parabolic curve.

17. (Original) The apparatus of claim 13 in which the rotated parabolic curve may be approximated by a truncated expansion of an equation

$$Z[x,f,\theta]=-\frac{1}{4}Csc^2[\theta]\,Sec[\theta]\left(-4f-4f\,Cos[2\theta]+x\,Sin[\theta]+8\sqrt{f}\,\sqrt{Cos^2[\theta](f-x\,Sin[\theta])}+x\,Sin[3\theta]\right),$$

where Z is the distance between a point on the curve and a plane passing through the location and perpendicular to the optical axis, x is the distance from the point to the optical axis, θ is the angle of rotation of the parabolic curve, and f is the focal length of the parabolic curve.

18-20. (Cancelled).

21. (Original) A method comprising:

generating light rays from a location on an optical axis;

reflecting the light rays with a first reflective surface having a curvature such that substantially all of the reflected light rays propagate with a first convergence angle relative to the optical axis, the light rays converging toward a region to produce uniform illumination at the region.

22. (Original) The method of claim 21 further comprising reflecting the light rays with a second reflective surface having a curvature such that substantially all of the light rays reflected from the second reflective surface propagate with a second convergence angle relative to the optical axis, the light rays converging toward the region.

23. (Original) The method of claim 22 in which the second angle is different from the first angle.

24. (Currently amended) A method comprising:

providing a first reflective surface to reflect light rays emanating from a location, the first reflective surface having a curvature such that substantially all of the ~~reflected~~ light rays reflected from the first reflective surface propagate in a direction at a first angle with an axis and converge toward a region to produce uniform illumination at the region; and

providing a second reflective surface to reflect light rays emanating from the location, the second reflective surface having a curvature such that substantially all of the ~~reflected~~ light rays reflected from the second reflective surface propagate in a direction at a second angle with the axis and converge toward the region, the second angle different from the first angle.

25. (Original) The method of claim 24 in which the first reflective surface and the second reflective surface are concentric to the axis and the first reflective surface is closer to the location than the second reflective surface.

26. (Original) The method of claim 24 further comprising adjusting the relative positions of the first and second reflective surfaces so that when light rays are reflected by the first reflective surface, the reflected light rays are not blocked by the second reflective surface.

27. (Original) The method of claim 26 further comprising treating the surface of the first and second reflective surfaces to enhance reflectivity of light having wavelength less than 300 nm.

28-30. (Cancelled).